# **BASIC INLINE LIQUID VARIABLE AREA FLOW METER**

Ideal for monitoring pump performance as well as measuring fluids in hydraulic circuits and cooling systems.



## **TECHNICAL SPECIFICATIONS**

Measuring Accuracy ±2.0% of full scale

Repeatability ±1% of full scale

Flow Measuring Range 0.1-150 GPM (0.5-550 LPM)

#### Maximum Operating Pressure

Aluminum and brass meters: 3500 PSIG (240 Bar) Stainless steel meters: 6000 PSIG (410 Bar)

#### Maximum Operating Temperature

240°F (116°C) Note: for operation to 600°F (316°C), see our High Temperature Data sheet.

DTE 25 is a registered trademark of Exxon Mobil.

Window Tube

Window Seals

#### Standard Calibration Fluids

Oil meters: DTE 25® @ 110°F (43°C), 0.873 sg Water meters: tap water @ 70°F (21°C), 1.0 sg

#### **Filtration Requirements**

74 micron filter or 200 mesh screen minimum

#### Viscosity

Brass

PTFE

Polycarbonate

Buna-N® (STD),

Standard viscosities up to 110 cSt. For viscosities between 110 to 430 cSt contact factory.

**Stainless Steel** 

Polycarbonate

Buna-N® (STD),

PTFE

# BENEFITS

#### Choice of Materials

Select from aluminum, brass or stainless steel to meet system and liquid requirements.

#### **Unrestricted Mounting**

Allows for horizontal, vertical or inverted installation and does not require straight plumbing on inlet or outlet.

#### Superior Exterior Design

Weather-tight for use outdoors and/or on systems where wash downs are required.

#### Rugged and Reliable

These meters are constructed with all metal pressure vessels that allow safe and permanent installation.

#### **High Pressure Operation**

The magnetically coupled follower design allows operation to 6000 PSIG.

#### Multiple Ports Available

Standard selection of NPT, SAE and BSPP ports reduces the amount of adapters required for installation.



# MATERIALS OF CONSTRUCTION (WETTED COMPONENTS)

MATERIALS OF CONSTRUCTION (NON-WETTED COMPONENTS)

Aluminum

Polycarbonate

Buna-N® (STD),

PTFE

	Aluminum	Brass	Stainless Steel
Casing & End Ports	Anodized Aluminum	Brass	Stainless Steel
Seals	Buna-N® (STD), EPR, FKM or FFKM	Buna-N <sup>®</sup> (STD), EPR, FKM or FFKM	FKM with PTFE backup (STD), Buna-N®, EPR or FFKM
Transfer Magnet	PTFE coated Alnico	PTFE coated Alnico	PTFE coated Alnico
All other internal parts	Stainless Steel	Stainless Steel	Stainless Steel

Buna-N is a registered trademark of Chemische Werke Huls.

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PART NUMBER GUIDE				
	PORTING/THREAD TY			
PORT SIZE RANGE $1/4" - 1/2" = 3$ $3/4" - 1" = 4$	(all female) 1/4" NPTF, dry seal 3/8" NPTF, dry seal	<b>Size</b> 3 only = S 3 only = A		
1-1/4 - 2" = 5 MATERIAL	1/2" NPTF, dry seal 3/4" NPTF, dry seal 1" NPTF, dry seal	$3 \text{ only} = \boxed{B}$ $4 \text{ only} = \boxed{C}$ $4 \text{ only} = \boxed{D}$		
Aluminum=ABrass=BStainless Steel=S	#6 SAE, O-ring seal #8 SAE, O-ring seal #10 SAE, O-ring seal #12 SAE, O-ring seal	3 only = F		
MAX. PRESSURE RATING         3500 psig (liquids, aluminum & brass) = 6         6000 psig (liquids, stainless steel) = 7	#16 SAE, O-ring seal 1-1/4" NPTF, dry seal 1-1/2" NPTF, dry seal 2" NPTF, dry seal	$4 \text{ only } = \mathbf{J}$ $5 \text{ only } = \mathbf{K}$ $5 \text{ only } = \mathbf{L}$ $5 \text{ only } = \mathbf{M}$		
FLUID MEDIA	#20 SAE, O-ring seal #24 SAE, O-ring seal #32 SAE, O-ring seal	5  only = P 5  only = Q		
Oil @ 0.873 specific gravity       =       H         Water @ 1.0 specific gravity       =       W         Note: For special scales consult factory.	3/8" BSPP 1/2" BSPP 3/4" BSPP 1" BSPP	$3 \text{ only } = \mathbb{R}$ $3 \text{ only } = \mathbb{T}$ $4 \text{ only } = \mathbb{U}$ $4 \text{ only } = \mathbb{V}$		
	IDOFF			

(all female)	Size	
1/4" NPTF, dry seal	3 only	= S
3/8" NPTF, dry seal	3 only	= A
1/2" NPTF, dry seal	3 only	= B
3/4" NPTF, dry seal	4 only	= C
1" NPTF, dry seal	4 only	= D
#6 SAE, O-ring seal	3 only	= E
#8 SAE, O-ring seal	3 only	= F
#10 SAE, O-ring seal	3 only	= G
#12 SAE, O-ring seal	4 only	= H
#16 SAE, O-ring seal	4 only	= J
1-1/4" NPTF, dry seal	5 only	= K
1-1/2" NPTF, dry seal	5 only	= L
2" NPTF, dry seal	5 only	= M
#20 SAE, O-ring seal	5 only	= N
#24 SAE, O-ring seal	5 only	= P
#32 SAE, O-ring seal	5 only	= Q
3/8" BSPP	3 only	= R
1/2" BSPP	3 only	= T
3/4" BSPP	4 only	= U
1" BSPP	4 only	= V
1-1/4" BSPP	5 only	= W
1-1/2" BSPP	5 only	= Y
2" BSPP	5 only	= X

Note: SAE porting not available in Brass. Consult factory for SAE brass meter requirements.

# SPECIAL SCALE/CUSTOM PRODUCT

### **OPTIONAL FLOW DIRECTIONS**

Standard Flow, Uni-Directional
Reverse Flow
Bi-Directional Flow (For bi-directional

=	R	F	
nal flow	refer	to	

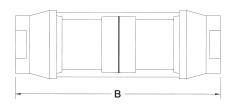
bi-directional data sheet. Please consult factory for availability and delivery time.)

_	FLOW RANGES				
	Liquid		Size		
	0.1-1.0 GPM	0.5-4 LPM	3 only	=	0 1
	0.2-2.0 GPM	1-8 LPM	3 & 4	=	0 2
	0.5-5.0 GPM	2-19 LPM	3 & 4	=	0 5
	1-10 GPM	5-37.5 LPM	3 & 4	=	1 0
	1-15 GPM	5-55 LPM	3 & 4	=	1 5
	2-20 GPM	10-75 LPM	4 only	=	2 0
	2-25 GPM	10-95 LPM	4 & 5	=	2 5
	4-30 GPM	15-115 LPM	4 only	=	3 0
	4-40 GPM	20-150 LPM	4 only	=	4 0
	6-50 GPM	20-190 LPM	4 & 5	=	5 0
	6-75 GPM	30-280 LPM	5 only	=	7 5
	10-100 GPM	50-375 LPM	5 only	=	8 8
	25-150 GPM	100-550 LPM	5 only	=	9 9

# **MECHANICAL - SIZE CODE**

DIM	Series 3	Series 4	Series 5	Series 5 (2" port only)
А	1-7/8" (48mm)	2-3/8" (60 mm)	3-1/2" (90mm)	3-1/2" (90mm)
В	6-9/16" (167mm)	7-5/32" (182mm)	10-1/8" (258mm)	12-5/8" (322mm)





Products may be subject to change without notice - Contact factory for the most up-to-date product information.

